

### **REMARKS**

In the Office Action, the Examiner rejected claims 1-76. By the present Response, Applicants amend claims 1, 8-15, 20-35, 37-48, and 50-76 to further clarify the claimed subject matter. Upon entry of the amendments, claims 1-76 will remain pending in the present patent application. Applicants respectfully request reconsideration of the above-referenced application in view of the foregoing amendments and following remarks.

As a preliminary matter, Applicants do not necessarily agree with the Examiner's conclusions with respect to the disclosure dates of subject matter in the present claims. However, Applicants believe the pending claims are allowable over the cited art for the substantive reasons provided below. Accordingly, Applicants choose to proceed on this basis while preserving the right to demonstrate that various subject matter may have a disclosure date other than that used by the Examiner.

### **Objections to the Drawings**

In the Office Action, the Examiner objected to FIGS. 6, 17, and 23 for perceived informalities. Particularly, the Examiner noted that FIG. 17 indicates "overflow condition" at step 366 even if no overflow exists, and further noted inconsistencies between FIG. 23 and the associated text in the specification. Applicants have amended FIGS. 17 and 23 for further clarification and to otherwise increase the consistency between the figures and associated text provided in the specification. These amended FIGS. 17 and 23 are enclosed herewith and entitled "Replacement Sheets." With respect to FIG. 6, Applicants respectfully note that FIG. 6 is labeled as FIG. 6 and that every step of the illustrated process is also labeled. Accordingly, Applicants respectfully request clarification of the Examiner's objection, along with a supporting rationale in accordance with applicable regulations regarding drawings, or withdrawal of the objection to FIG. 6. In light of the amendments to these figures and the foregoing remarks, Applicants respectfully request withdrawal of the Examiner's objections to the drawings.

### **Objections to the Specification**

In the Office Action, the Examiner also objected to the specification for various informalities. Although Applicants do not necessarily agree with the Examiner's objections, Applicants amended the specification as set forth above in the interest of advancing prosecution of the present application. In view of these amendments, Applicants believe the Examiner's objections are moot. Accordingly, Applicants respectfully request withdrawal of the Examiner's objections to the specification.

### **Renumbering of the Claims**

Applicants acknowledge the Examiner's renumbering of the present claims under 37 C.F.R. § 1.126 in view of the inadvertent omission of claim 3 from the original claims of the application. Applicants appreciate the Examiner's efforts in this regard. Applicants note that the claim listing provided above incorporates the renumbering indicated by the Examiner, as well as amendments to these claims to adjust the dependencies of a number of dependent claims in light of the renumbering. Should the Examiner believe any additional changes are necessary in view of the renumbering, the Examiner is kindly invited to indicate such changes so Applicants may address them in a future communication.

### **Rejections Under 35 U.S.C. § 112**

In the Office Action, the Examiner rejected claims 43 and 69-76 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Particularly, the Examiner noted that the present specification fails to teach a "Boolean tag." However, Applicants respectfully note that the specification does teach the use of data flags, including a "Boolean flag." Page 52, line 21 – page 53, line 27; FIG. 27. Applicants further note that claim 43 clearly recites "a Boolean *flag*" (emphasis added), while claim 69 originally recited first and second Boolean *tags*. Applicants have amended claim 69, as noted above, to instead recite first and second Boolean *flags*, which are clearly taught in the passage of the specification cited above. Because of this teaching

and the present amendments to claim 69, Applicants believe the present rejection is no longer applicable. Accordingly, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 112.

### **Rejections Under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 1-61 and 69-76 under 35 U.S.C. § 102(e) as anticipated by Dekel et al. (U.S. Patent No. 6,314,452). Applicants respectfully traverse this rejection.

#### ***Legal Precedent***

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the *identical* invention “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

#### ***Omitted Features of Independent Claim 1***

Turning now to the present claims, the Dekel et al. reference fails to disclose each element of independent claim 1. For instance, independent claim 1 recites “*selecting an area of interest of the image via the decomposition level index and the tessellation block indices*” (emphasis added). Claim 1 also recites “*handling the area of interest selected via the decomposition level index and the tessellation block indices.*” Because the Dekel et al. reference fails to disclose such elements, the cited reference fails to anticipate independent claim 1.

The Dekel et al. reference is generally directed to the transmission of static images over communication channels. Col. 1, lines 8-14. The Dekel et al. system includes a client computer 110 for receiving image data and a server 120 for transmitting image data, which are connected to each other via communication network 130. Col. 3, line 66 – col. 4, line 16; FIG. 1. The apparatus is configured to allow client 110 to select a region of interest (ROI) with respect to a particular set of image data and to formulate the region of interest into a request list corresponding to particular data blocks addressed by position and resolution within the larger set of data. Col. 4, lines 62-65; *see also* col. 5, lines 25-37. It should be noted that the selection process includes user interaction with a graphical user interface (GUI), such as scrolling in a view window or zooming-in on a portion of a displayed image. Col. 15, lines 17-21. Based on this interaction, certain view parameters are received by the client computer 110, including “worldPolygon,” “scale,” and “deviceDepth” parameters. Col. 15, lines 39-60. Importantly, these parameters are used *after the selection of a region of interest* to generate a data block request list for a region of interest. *Id.* In other words, in the Dekel et al. system, a user selects a region of interest via the GUI, which initiates the transmission of a number of parameters, which, in turn, are used to generate a request for data blocks indexed by resolution level and position.

Conversely, as noted above, independent claim 1 clearly provides for “selecting an area of interest of the image via the decomposition level index and the tessellation block indices.” Even if the resolution level and position of the Dekel et al. data blocks could be reasonably compared to the presently recited decomposition level index and the tessellation block indices, respectively, the cited reference clearly indicates that the user selection of a region of interest is accomplished independently from the resolution level and position, which are merely used *after* such selection to request the data blocks. Because the selection of a region in the Dekel et al. reference is performed independently of the resolution and position of any data blocks, the Dekel et al. reference fails to disclose “selecting an area of interest *via the decomposition level index and the tessellation*

*block indices*” (emphasis added) as recited by independent claim 1. Further, because the reference fails to teach selecting an area via these indices, the reference necessarily fails to teach “handling the area of interest selected via the decomposition level index and the tessellation block indices,” as also recited by independent claim 1. Because of these deficiencies, the Dekel et al. reference cannot sustain a *prima facie* case of anticipation of claim 1.

***Omitted Features of Independent Claim 21***

Likewise, the Dekel et al. reference also fails to disclose each element of independent claim 21. For instance, independent claim 21 recites “*defining a spatial region of interest within an image based on a plurality of addressable blocks comprising a decomposition level index and tessellation block indices*” (emphasis added). Because the Dekel et al. reference fails to disclose such an element, the cited reference fails to anticipate independent claim 21.

As noted above, the Dekel et al. reference teaches user-selection of a region of interest, which is then manipulated into parameters and a request list that requests data blocks by resolution level and position. However, the Dekel et al. reference does not teach defining a region of interest “*based on a plurality of addressable blocks comprising a decomposition level index and tessellation block indices*” (emphasis added), as recited by the instant claim. In fact, the Examiner has acknowledged that the Dekel et al. reference discloses that the user selects a region of interest, and that a request list of associated data blocks or tiles are generated based on the region of interest. Office Action mailed March 18, 2005, page 9. Because the Dekel et al. reference teaches, at most, defining a region of interest independent of a decomposition level index and tessellation block indices, Applicants respectfully submit that the cited reference does not, and cannot, disclose “defining a spatial region of interest within an image based on a plurality of addressable blocks comprising a decomposition level index and tessellation block

indices,” as recited by independent claim 21. Consequently, the Dekel et al. reference fails to anticipate independent claim 21 or the claims depending therefrom.

***Omitted Features of Independent Claim 36, 49, and 69***

The Dekel et al. reference similarly fails to disclose each element of independent claims 36, 49, and 69. For instance, independent claim 36 recites “tracking presence or absence of the plurality of addressable blocks at a client via at least one tracking indicator” (emphasis added). Independent claims 49 and 69 each contain similar recitations regarding tracking the presence or absence of the plurality of addressable blocks. Notably, independent claim 69 also recites tracking via first and second Boolean flags. Because the Dekel et al. reference fails to disclose these elements, the cited reference fails to anticipate independent claims 36, 49, and 69.

The Examiner cited numerous passages in the Dekel et al. reference with respect to the tracking element provided above. Office Action mailed March 18, 2005, pages 11-15. However, Applicants respectfully submit that these cited passages fail to disclose either “tracking presence or absence of the plurality of addressable blocks” or “at least one tracking indicator,” let alone performing such tracking via a tracking indicator. While the cited passages are too numerous to discuss at length, the passages generally concern the caching of data at the client computer and requesting additional data from the server if the needed data is not in the client computer cache. However, Applicants respectfully submit that the mere search for data in the client cache before requesting the data from the server cannot be reasonably compared to “tracking presence or absence of the plurality of addressable blocks at a client via at least one tracking indicator” as presently recited. Indeed, terms “track,” “tracks,” “tracking,” and so forth do not appear *even a single time* in the cited reference.

As acknowledged by the Examiner, the Dekel et al. client can only determine which tiles should be requested by comparing the required tiles with the tiles already stored in the

client cache. *Id.* at 14-15. In other words, Dekel et al. require the search of *all* tiles stored in the client cache to determine presence or absence of the desired blocks. Although Dekel et al. may disclose *searching for* the presence or absence of relevant data, it is apparent that the Dekel et al. system does not provide for *tracking* such presence or absence. Further, with respect to the Examiner's assertion that components  $n_x$  and  $n_y$  of Equation 1.3 of the Dekel et al. reference are indicators representing blocks to be retrieved, Applicants note that the cited reference clearly indicates that these components relate to the size of the rectangle from which the data blocks are selected. Col. 18, line 62 – col. 19, line 16. As such, these "indicators" do not even represent the blocks to be retrieved, let alone represent a "tracking indicator." Applicants, therefore, respectfully request retraction of this mischaracterization by the Examiner or, alternatively, a clear and convincing rationale in support for characterizing these indicators in a manner inconsistent with the cited reference. Because the Dekel et al. reference fails to disclose "tracking presence or absence of the plurality of addressable blocks at a client via at least one tracking indicator," the cited reference cannot support a *prima facie* case of anticipation of claims 36, 49, and 69, or their respective dependent claims.

Still further, Applicants respectfully note that the term "Boolean flag," as recited in claim 69, has a particular meaning in the programming arts that would be appreciated by one skilled in the art. Particularly, a Boolean flag is an indicator that may be set in one of two positions: "true" or "false." As the tags cited by the Examiner do not contain components that may be set to true or false, these tags cannot be reasonably compared to the Boolean tags recited by independent claim 69, as they would be understood by any person of ordinary skill in the art. Accordingly, independent claim 69 is also believed allowable over the cited art for this reason, in addition to those provided above.

For these reasons, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 102 and allowance of claims 1-61 and 69-76.

**Rejections Under 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 62-68 under 35 U.S.C. § 103(a) as unpatentable over Dekel et al. in view of Cooke, Jr. et al. (U.S. Patent No. 6,574,629). Applicants respectfully traverse this rejection.

***Legal Precedent***

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

***Deficiencies of the Rejections***

Applicants note that each of claims 62-68 depends from independent claim 49. As discussed above, the Dekel et al. reference fails to disclose each element of independent claim 49. Further, the Cooke, Jr. et al. reference does not obviate the deficiencies of the Dekel et al. reference. As a result, dependent claims 62-68 are allowable on the basis of their dependency from a respective allowable independent claim, as well as for the subject matter separately recited in these dependent claims. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claims 62-68.

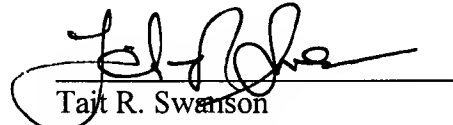


**Conclusion**

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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